

## ABSTRACT OF THE DISCLOSURE

A field effect transistor in which at least one vertically arranged semiconductor column, with a diameter in the nanometer range, is located  
5 between a source and a contact and has an annular surround of a gate contact with retention of an insulation gap. A simplified production method is disclosed and the transistor produced thus is embodied such that the semiconductor columns are embedded in a first and a second insulation layer, between which a metal layer, running to the outside as a gate contact,  
10 is arranged, the ends of which, extending upwards through the second insulation layer, are partly converted into an insulator, or removed and replaced by an insulation material.